Ocularis

Installation and Licensing Guide

Smarter Surveillance
for a Safer World

OnSSI

On-Net Surveillance Systems, Inc.
One Blue Hill Plaza, 7th Floor, PO Box 1555
Pearl River, NY 10965
Phone: (845) 732-7900 | Fax: (845) 732-7999
Web: www.onssi.com

Ocularis 5.1

00010082015-1504-5.1.0.170

Legal Notice

This product manual is intended for general information purposes only, and due care has been taken in its preparation.

Any risk arising from the use of this information rests with the recipient, and nothing herein should be construed as constituting any kind of warranty.

© 2002-2015 On-Net Surveillance Systems, Inc. All rights reserved. OnSSI and the 'Eye' logo are registered trademarks of On-Net Surveillance Systems, Inc. Ocularis, Ocularis Client, Ocularis Client Lite, Ocularis Video Synopsis, NetEVS, NetDVMS, NetDVR, ProSight, NetGuard, NetGuard-EVS, NetSwitcher, NetMatrix, NetCentral, NetTransact, NetPDA and NetCell are trademarks of On-Net Surveillance Systems, Inc. All other trademarks are property of their respective owners.

On-Net Surveillance Systems, Inc. reserves the right to change product specifications without prior notice.

US patent # 8,390.684 B2 for Ocularis Client

Patents Applied For in the U.S. and Abroad

Table of Contents

Legal Notice 2

INTRODUCTION 2

Ocularis Models 2

WHERE TO INSTALL COMPONENTS 3

Ocularis Professional 3
Ocularis Enterprise 4
Ocularis Ultimate 5

GETTING STARTED WITH OCULARIS 6

Minimum System Requirements 6
Installing Ocularis on a New System 6
Upgrading to Ocularis Version 5.1 7

OCULARIS INSTALLATION & CONFIGURATION 8

DOWNLOAD THE OCULARIS INSTALLATION FILE 9

EXTRACT OCULARIS INSTALLATION FILE 10

INSTALLING OCULARIS BASE 12

LICENSING OCULARIS BASE 16

INSTALLING OCULARIS COMPONENTS 20

Ocularis Component Location 20

INSTALLING OCULARIS ADMINISTRATOR 22

INSTALLING OCULARIS CLIENT 23

INSTALLING OCULARIS RECORDER 24

Firewalls 24
Recorder Components 24
Recorder Component Installation 25

UPDATE SERVICE 34

OCULARIS RECORDER LICENSING 34

Supported Recorders 34
Licensing Online 34
Licensing a Retail Version Online 34
Licensing a Demo Version Online 35
Licensing Offline 35
First Time Licensing 35
Changes to Server Hardware 36
Updating A License 36

OCULARIS RECORDER MANAGER 37

To Install only the Ocularis Recorder Manager 37

OCULARIS RECORDER EVENT PROXY 38

To Install the Ocularis Event Proxy 38
To Configure the Ocularis Event Proxy 39

APPENDIX A OCULARIS PORTS 42

CONTACT INFORMATION 43

Introduction

Ocularis 5 is OnSSI's newest and most innovative and cost effective open platform Video Management Software (VMS) and is designed to enhance your security while simplifying your daily workload.

These instructions should be used by administrators installing an Ocularis system.

Ocularis Models

Ocularis version 5 is offered in three models, designed to meet the needs of organizations of all sizes and structures, from single-location retail outlets or schools, to multiple-site, complex municipal and campus installations.

Ocularis Professional (PRO) – Scalable video management for small to medium single and multi-site applications.

Ocularis Enterprise (ENT)– Surveillance for locally managed or centrally managed mid to large scale installations.

Ocularis Ultimate (ULT) – Surveillance video management for mobile applications and complex environments with multiple, simultaneous viewing clients.

The **Ocularis™ Platform**, regardless of model, consists of the following components:

- **Ocularis Base** – server software application which regulates and manages the flow of data between video client users, recording servers, video wall management and an integrated alerting application.
- **Ocularis Administrator** - The front end software application used to manage Ocularis Base.
- **Ocularis Recorder** - An application is required to supply camera configuration and recording.
- **Ocularis Client** – OnSSI's award winning video client application.
- **Optional Add-On Applications** – these include Remote Video Wall, Ocularis Media Server, and Ocularis OpenSight™. Add-ons are made available as they are introduced. See our website www.onssi.com or call OnSSI Sales for information on Ocularis Add-Ons.

These instructions provide detailed instructions for installing Ocularis and its components. For a more concise installation guide, see the *Ocularis Quick Start Guide*.

Where to Install Components

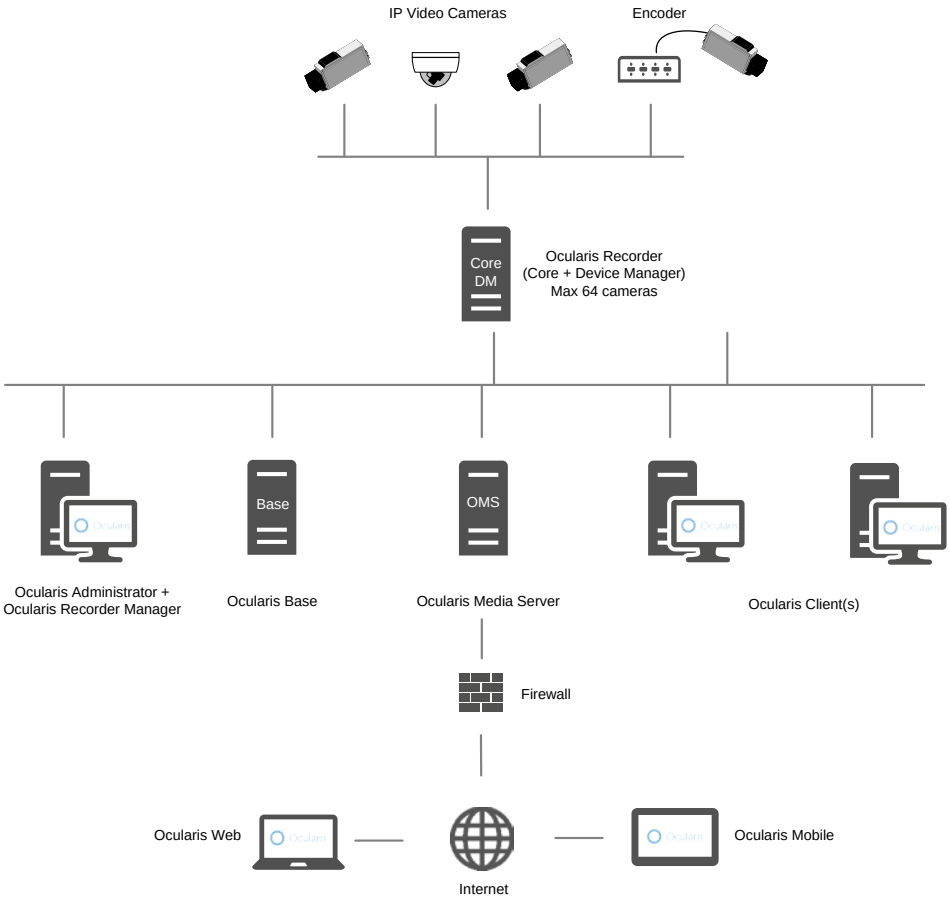
Ocularis 5 sample system diagrams are shown below and are only an example to represent where different components of Ocularis may be installed. These are by no means the only way the system can be laid out. Contact se@onssi.com for pre-installation advice on system layout.

It is important to note:

- **For Ocularis Ultimate and Ocularis Enterprise, there must be at least one 'Core'. The first Core that is installed is called the 'Master' Core. It is the only core that is required on these systems and there should be only one Master Core installed. Optionally, you may install an additional core, known as a 'Slave' core that automatically provides redundancy for the Master core. It is not necessary to install more than two cores in these models but you may do so if desired. Install a 'Device Manager' or DM on each additional computer to support additional cameras. Only one recorder SLC is required in these models.**
- **For Ocularis Professional only, there must be a Master Core and DM on each server. There are no Slave Cores in this model. Each Master Core requires a unique SLC available from OnSSI Sales.**

Ocularis Professional

Ocularis Professional has a maximum limit of 64 cameras per server. Each server contains a Core (Master) and Device Manager (DM). The Master Core is what is licensed so if you need additional servers, contact OnSSI Sales to obtain additional SLCs. **This is the ONLY model where a Master Core is required on each server**.

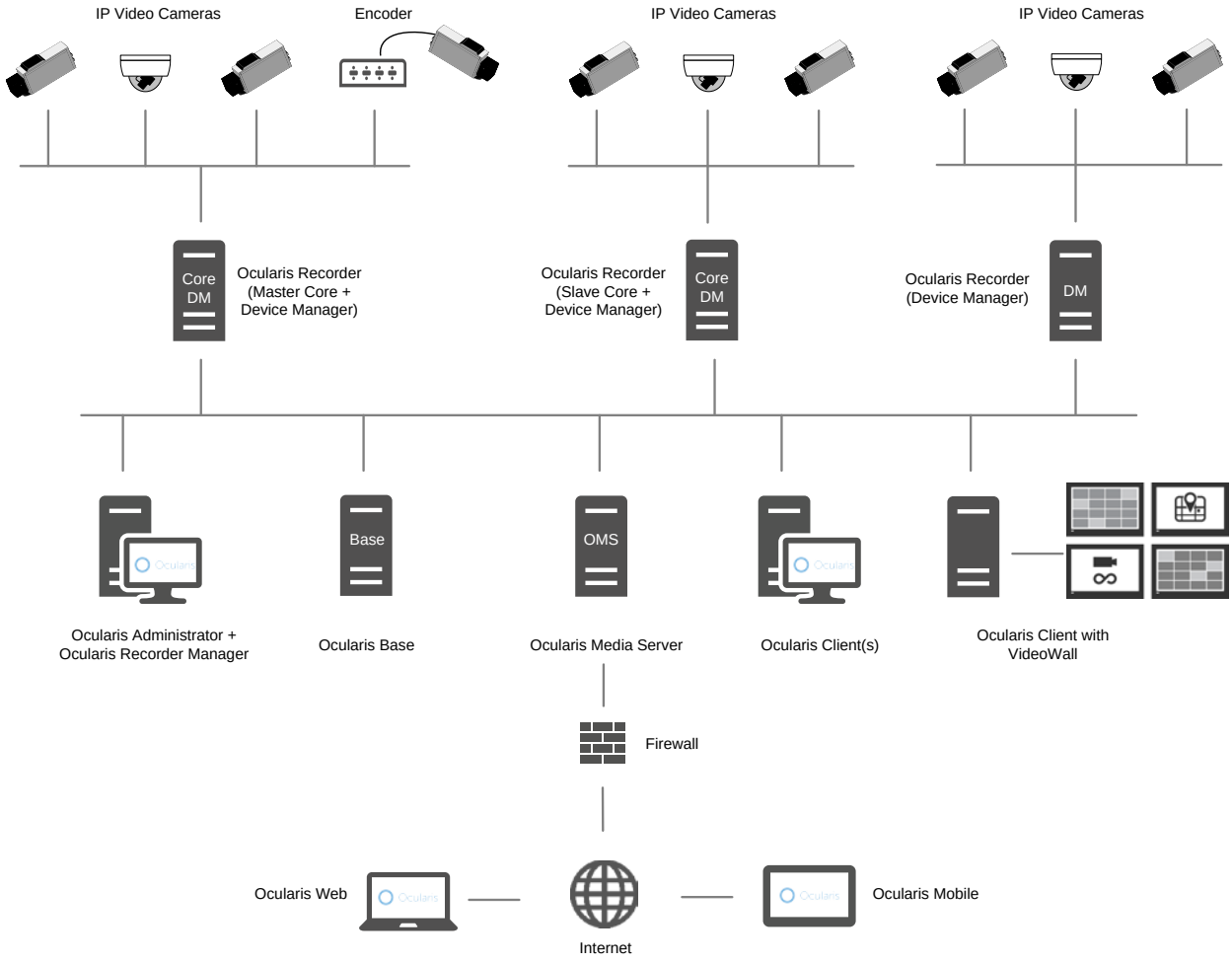


Ocularis Enterprise

Ocularis Enterprise has no imposed software limitation on the number of cameras per server. It is only limited by the available hardware resources.

On the first server, install a Master Core and Device Manager (DM). Add additional DM servers if you want to add more cameras on a separate machine. You may install a 'Slave' core as an optional redundant backup for the Master Core.

You do not need to add a core to each server, nor do you typically need more than 2 cores in any environment.



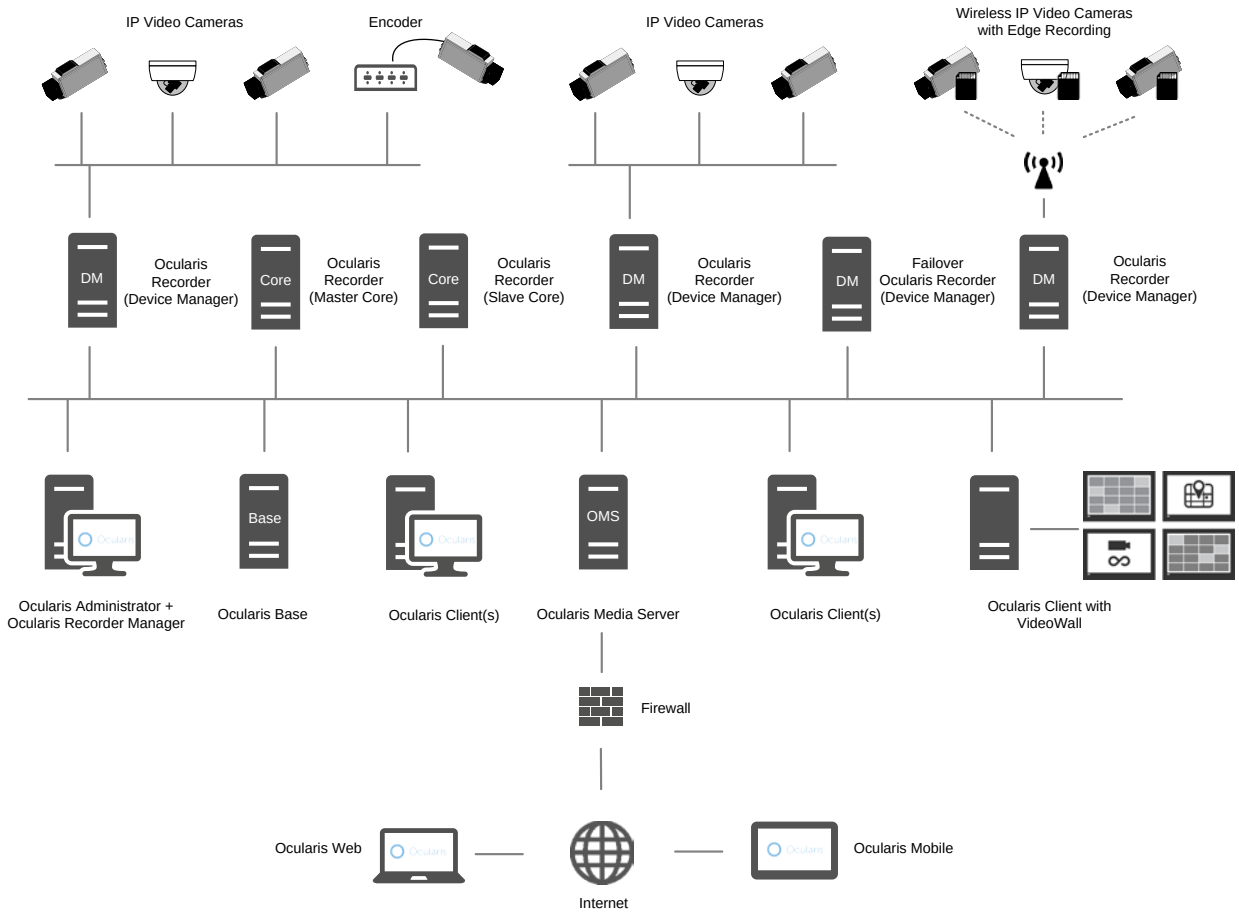
Ocularis Ultimate

Ocularis Ultimate has no imposed software limitation on the number of cameras per server. It is only limited by the available hardware resources.

On the first server, install a Master Core and optionally a Device Manager (DM). Add additional DM servers if you want to add more cameras on a separate machine. You may install a 'Slave' core as an optional redundant backup for the Master Core.

You do not need to add a core to each server, nor do you typically need more than 2 cores in any environment.

If you have multiple Device Managers, you may configure them as failover services for each other or configure a standalone machine dedicated as a backup DM. This configuration is done after installation.



If you have any questions or concerns whatsoever regarding where to install components, contact OnSSI Sales Engineering at se@onssi.com.

Getting Started with Ocularis

Minimum System Requirements

Requirements for individual components may be found at: http://www.onssi.com/hardware-recommendations.

Installing Ocularis on a New System

Regardless of model, a recommended process flow to prepare the video management environment with Ocularis on a new system is as follows:

1. Download and extract the Ocularis model installation file(s) from http://www.onssi.com/support/downloads.
2. Install the Ocularis Base software component.
    - In large environments, the Base component should be installed on a dedicated server. In some cases, a dedicated server is not necessary. For Ocularis Professional, for instance, Ocularis Base may be installed on the same PC as the other Ocularis components. As the system grows, additional recorders may be added.
    - System requirements may be found on the http://www.onssi.com/hardware-recommendations website for detailed hardware and operating system specifications.
    - Refer to Installing Ocularis Base on page 12 for details on the software installation.
    - Anti-Virus software must be disabled during the installation of the Ocularis Base component.
3. License Ocularis.
    - Prior to using Ocularis components, you must license your copy of Ocularis Base. See Licensing Ocularis Base on page 16 for more details on how to activate the software.
4. Install the *Ocularis Administrator* application.
    - This component must be installed on a workstation with network connectivity to the Ocularis Base component. It may reside on the same PC as the Base provided that graphic card requirements are met. You may install it on as many PCs as needed.
    - Refer to Installing Ocularis Administrator on page 22for details on the software installation.
5. Install the Ocularis recording component software.
    - The Ocularis Professional, Enterprise and Ultimate recorders contain the following components supported in this version:
        1.) Master Core Server – this is the service which manages the recorder configuration
        2.) Device Manager (DM) – this is the server which manages the cameras and video storage
        3.) Recorder Manager – this is the application used to configure the Core and DM
        4.) Slave Core Server (optional and only in Ocularis ENT and ULT)
        5.) Event Proxy
    - Most of these components may all be installed on the same PC or separately.
    - If applicable, run any Recorder Update patches that are available.
6. Use the Ocularis Recorder Manager application to change the default administrator password of the recorder. This account will be used to import the recorder into Ocularis.
7. Add and configure video cameras and devices on the recording component.
8. Install the *Ocularis Client* on at least one workstation.
    - See Installing Ocularis Client on page 23 for additional instructions on installation.
9. Configure Ocularis Base using *Ocularis Administrator*.
    - Refer to the *Ocularis Administrator User Manual* for further instructions.

10. Test connectivity of cameras by logging into Ocularis Base with *Ocularis Client*.
11. Install any remaining workstations with *Ocularis Client*.
12. Configure the event proxy to forward events from the recorder to the Ocularis Base Server.
    - Installation and configuration of Event Proxies can be found at the end of this document.
13. Within 30 days of installing cameras on the recording component(s), you must register the Master Core.
    - See Ocularis Recorder Licensing on page 34 for further instructions.

Upgrading to Ocularis Version 5.1

Refer to the document *Upgrading to Ocularis 5.1* for full details on upgrading an Ocularis system. Use the instructions found here for new installations.

Ocularis Installation & Configuration

Items to consider prior to installation:

- Once all components are installed, synchronize the date and time between the server and workstations.

> ***Note:*** *The time and date tolerance for all PCs using Ocularis is a maximum of five (5) minutes. If the time is off by more than 5 minutes between the Ocularis Base machine and Ocularis Client workstations, log in attempts will fail.*

- The Ocularis Base component should be installed first. After that, the order of installing each component does not matter.
- You must either be logged in as the Windows account '*Administrator'* when licensing Ocularis Base or as a user with administrative privileges and select 'Run as Administrator' when launching the licensing application.
- Depending on your current Windows configuration, you may be asked to insert your original Windows installation CD in order to install additional Windows components.
- You will need to have your Ocularis Software License Code (SLC) on hand when you license the application.

The following components are outlined in this document:

- Download the Ocularis Installation File
- Extract Ocularis Installation File
- Installing Ocularis Base
- Licensing Ocularis Base
- Installing Ocularis Components
- Installing Ocularis Administrator
- Installing Ocularis Client
- Installing Ocularis Recorder
- Ocularis Recorder Manager
- Ocularis Recorder Event Proxy

Download the Ocularis Installation File

If necessary, Ocularis software may be obtained from the OnSSI website. Follow these instructions to download the installation file.

1. Open a browser and go to the 'Support → Download Software' page on the OnSSI website
2. On the 'Download Software' page, click the link for the Ocularis model you wish to download (e.g. **Ocularis Enterprise 5.1**)
3. A short web form appears. Fill out the form and click **Submit**.

   You will receive an email containing the link to the download file, any relevant recorder patch updates and links to relevant documentation.
4. Click the link to download the Ocularis installation file.
5. You will be prompted to save the file. Select the desired file location and click **Save**.

   The file download may take several minutes depending on your connection speed. Be sure to remember the path to the directory where the files were saved.

Extract Ocularis Installation File

These steps outline the extraction of the Ocularis installation files and may be used for all Ocularis models and for new or existing installations.

1. Locate the Ocularis installation file. This file may have been downloaded from the OnSSI website or obtained through other means. The filename is: **Ocularis Installer 5.1.exe**. The same executable file is shared across Ocularis models. The SLC determines the model once it is applied.

WARNING: THIS PROCESS SHOULD BE PERFORMED ON THE SYSTEM WHERE OCULARIS BASE EXISTS (IF AN UPGRADE) OR WHERE IT WILL BE INSTALLED (NEW).

2. If it is not already there, copy the installation file from step 1 above to the Ocularis Base machine.
3. Double-click the file from step 1 above to launch and begin the file extraction.

   You'll see messages regarding the installation validation which may take several minutes.

The *Welcome to the Ocularis Installer Extraction Wizard* screen appears.

Ocularis Installer
Welcome to the Ocularis Installer Extraction Wizard
The wizard will extract the Ocularis Installer on your computer.
At the end of the extraction process you will have an option to install Ocularis Base Server. As a result, it is recommended that you extract these files on the computer that you intend to use for the Ocularis Base.
Press Next to continue, or Cancel to abort the extraction process.
SetupBuilder.com
Next >
Cancel

Figure 1 Ocularis Installer Extraction Wizard

4. Click **Next**.

   On the *Destination Folder* screen, you may modify the path for the installation files to be placed.

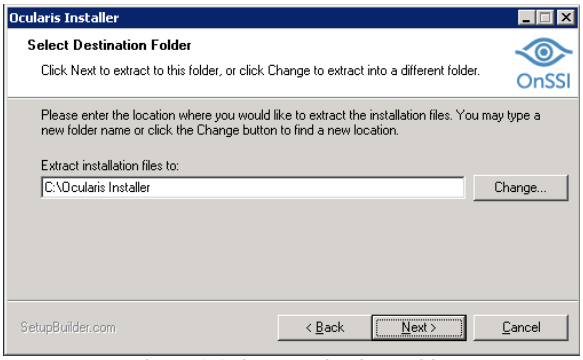

Ocularis Installer
Select Destination Folder
Click Next to extract to this folder, or click Change to extract into a different folder.
OnSSI
Please enter the location where you would like to extract the installation files. You may type a new folder name or click the Change button to find a new location.
Extract installation files to:
C:\Ocularis Installer
Change...
SetupBuilder.com
< Back
Next >
Cancel

Figure 2 Select Destination Folder

   Click **Next**.

5. The *Ready to Extract* summary screen is next. Click **Back** to make changes or click **Next** to proceed.

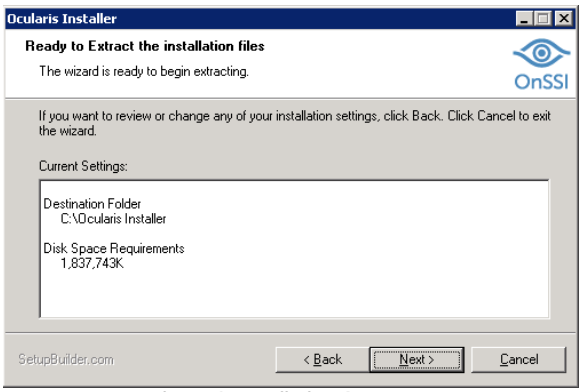

Ocularis Installer
Ready to Extract the installation files
The wizard is ready to begin extracting.
OnSSI
If you want to review or change any of your installation settings, click Back. Click Cancel to exit the wizard.
Current Settings:
Destination Folder
C:\Ocularis Installer
Disk Space Requirements
1,837,743K
SetupBuilder.com
< Back
Next >
Cancel

Figure 3 Installation Summary

Files are extracted and copied to the location specified. This may take several minutes. When all files are extracted, a *Setup Wizard Complete* screen appears. The installation files have been downloaded and unpacked. No applications or components have been installed.

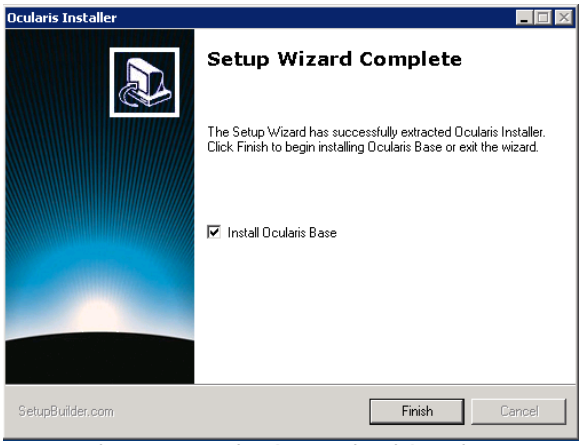

Ocularis Installer
Setup Wizard Complete
The Setup Wizard has successfully extracted Ocularis Installer. Click Finish to begin installing Ocularis Base or exit the wizard.
Install Ocularis Base
SetupBuilder.com
Finish
Cancel

Figure 4 Extraction Setup Wizard Complete

6. If you choose to:
    a. Install Ocularis Base now: make sure the corresponding checkbox is selected and click **Finish**. Proceed to *Installing Ocularis Base* below.
    b. If you choose to install Ocularis Base later: uncheck the *Install Ocularis Base* checkbox and click **Finish**. Proceed to *Installing Ocularis Base* below.

You have completed the extraction of the Ocularis installation files.

Installing Ocularis Base

Reminder:

- Anti-Virus software must be disabled during the installation of the Ocularis Base component.
- Follow this procedure when installing a new system or upgrading an existing Ocularis Base component.
- Ocularis Base uses SQL Server to store configuration data. By default, SQL Server Express 2008 will be used unless otherwise specified. Alternate instances of SQL Server may be used for advanced users.

TO INSTALL OCULARIS BASE

Use these steps for all feature sets of Ocularis.

WARNING: THIS PROCESS SHOULD BE PERFORMED ON THE SYSTEM WHERE OCULARIS BASE EXISTS (IF AN UPGRADE) OR WHERE IT WILL BE INSTALLED (NEW).

1. To install Ocularis Base after extracting the installer files (from *Extract Ocularis Installation File* on page 10), go to the directory where the *Ocularis* files were extracted.

   These installation files should be located on the Ocularis Base machine. If they are not, copy them to the Ocularis Base system.

2. The next step differs depending on the installation:

   a. For new installations, a notice appears recommending that you activate Ocularis now before continuing with the installation. This is recommended

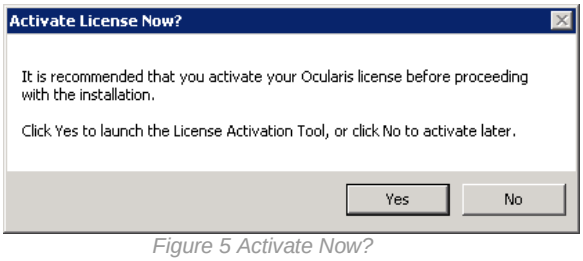

Activate License Now?
It is recommended that you activate your Ocularis license before proceeding with the installation.
Click Yes to launch the License Activation Tool, or click No to activate later.
Yes
No

Figure 5 Activate Now?

   You will need your Ocularis SLC to activate. Activation will be required at the end of the Base installation if you do not do it now.

   1. Click **Yes** to activate Ocularis now.

      The *Ocularis License Activation* screen appears as shown in Figure 9 on page 16.

   2. Enter the Ocularis SLC and click **Activate License**.
   3. Click **OK** on the License Activated pop-up.
   4. Click **Close** on the *Ocularis License Activation* screen.
   5. Proceed to step 3 below.

   b. If upgrading Ocularis, a message that a previous installation of this software has been detected. Click **Yes** to proceed with the installation. Be sure to have your new SLC in hand. Click **Yes** when ready

3. The *Ocularis Base Setup Wizard* screen appears.

Ocularis Base Installer
Welcome to the Ocularis Base Setup Wizard.
The wizard will install Ocularis Base v5 on your computer. This product is a server and should be installed on a Windows Server operating system for optimal performance.
It is strongly recommended that you exit all Windows programs before running this Setup program.
Click Cancel to quit Setup and then close any programs you have running. Click Next to continue with the Setup program.
WARNING: This program is protected by copyright law and international treaties.
Next >
Cancel

Figure 6 Ocularis Base Setup Wizard

Click **Next**.

4. The *License Agreement* appears. Please read, click the "*I accept*.." radio button and then click **Next**.
5. Select the type of installation: **Typical** or **Custom**. *Typical* will install all new files using default settings for file locations and database instance. *Custom* allows you to change these settings. The vast majority of installations should choose 'Typical'.

   Typical:

   a. Select the *Typical* radio button and click **Next**.

      Ocularis Base is installed using these default settings:

      - Base installation files are placed in `c:\Program Files\OnSSI\Ocularis Base`
      - Bookmark location is designated as: `c:\inetpub\wwwroot\OcularisService\Bookmarks`
      - Windows IIS is installed
      - SQL Server 2008 Express is installed with a Server Name of OCULARISSERVER, SA User Name of sa and an encrypted SA password.

      This installation may take several minutes.

> ***Note:*** *You may see a warning message if you are installing Ocularis Base on Windows 7 or other non-server level operating system. For demos and small applications, click 'Yes' to continue with the installation. For most standard production systems we recommend installing Ocularis Base on a server class operating system.*

> ***Note:*** *You may also see a message about dependencies required such as .Net Framework 4.0, SQL Server 2008, VC++ Redistributable 2010 and DirectX9c. Click 'OK' to install these (any missing components will be access from the OnSSI website).*

   Custom:

   a. Select the *Custom* radio button and click **Next**.

   b. On the *SQL Server instance* page, most users will use the default selection.

SQL Server Options Defined:

Use Ocularis default SQL Server instance – this default option will install SQL Server 2008 Express for use with Ocularis.

Edit System Administrator login - If you wish to modify the administrator login for the SQL Server instance, click the *Edit System Administrator* login checkbox. The corresponding fields will open to allow entry of the required criteria.

Use another SQL Server 2008 instance - If you have an existing SQL Server database that you wish to use, you may select this option. You will be required to enter login credentials for this SQL Server instance..

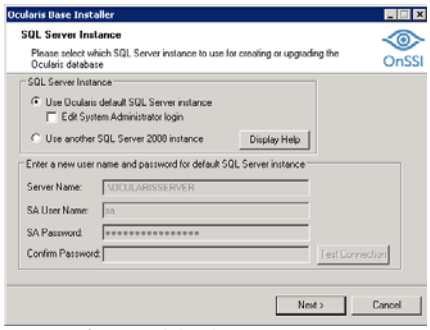

Ocularis Base Installer
SQL Server Instance
Please select which SQL Server instance to use for creating or upgrading the Ocularis database
OnSSI
SQL Server Instance
Use Ocularis default SQL Server instance
Edit System Administrator login
Use another SQL Server 2008 instance
Display Help
Enter a new user name and password for default SQL Server instance
Server Name:
SA User Name:
SA Password:
Confirm Password:
Test Connection
Next >
Cancel

Figure 7 SQL Server Instance

c. When ready, click Next.

d. On the *Select Bookmarks Folder* screen, you have the option to specify the location for the storage of Ocularis Bookmarks. Change the default location if necessary. When ready, click **Next**.

e. On the *Select Destination Folder* for Ocularis Base you may modify the directory path for the Ocularis Base files. We recommend using the default but you may modify the path here. Click **Next**.

f. The next screen summarizes the installation folders and size. Click **Back** to make changes or click **Next**.

> ***Note:*** *You may see a warning message if you are installing Ocularis Base on Windows 7 or other non-server level operating system. For demos and small applications, click 'Yes' to continue with the installation. For most standard production systems we recommend installing Ocularis Base on a server class operating system.*
>
> ***Note:*** *You may also see a message about dependencies required such as .Net Framework 4.x, SQL Server 2008, VC++ Redistributable 2010 and DirectX9c. Click 'OK' to install these (any missing components will be access from the OnSSI website).*

The Ocularis Base files are installed to the specified directory and may take several minutes. A new installer website is also created.

6. When installation is completed, the Setup Wizard Complete for Ocularis Base screen appears.

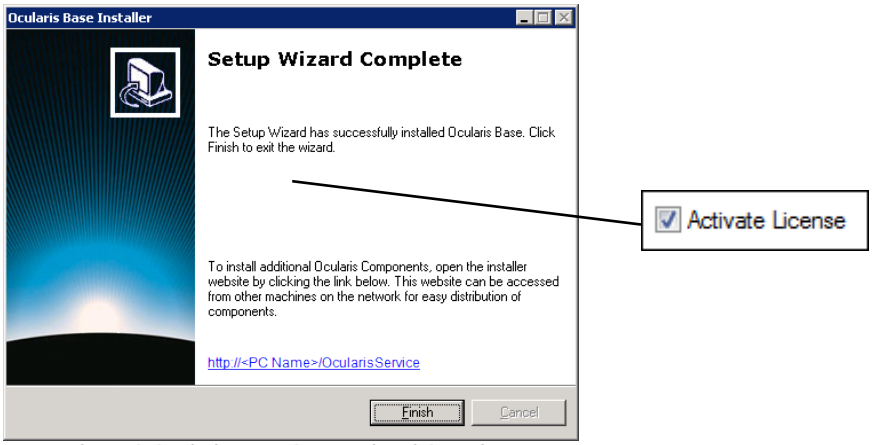

Ocularis Base Installer
Setup Wizard Complete
The Setup Wizard has successfully installed Ocularis Base. Click Finish to exit the wizard.
Activate License
To install additional Ocularis Components, open the installer website by clicking the link below. This website can be accessed from other machines on the network for easy distribution of components.
http://<PC Name>/OcularisService
Finish
Cancel

Figure 8 Ocularis Base Setup Wizard Complete

7. If you licensed Ocularis at the beginning of this procedure, you are done.
If you chose not to license Ocularis earlier, you are given the option to activate the Ocularis license upon completion of the wizard. It is recommended (but not mandatory) to do this at this time if you haven't already done so. Ocularis must be licensed before use.

a. If you choose to license Ocularis now, verify that the *Activate License* checkbox is checked and click **Finish**. The *Ocularis License Activation* application is automatically launched. Proceed to Licensing Ocularis Base below.

b. If you choose to activate the Ocularis license later, uncheck the *Activate License* checkbox and click **Finish**.

   When you are ready to license Ocularis, launch the Ocularis *License Activation* application from the desktop icon. Proceed to *Licensing Ocularis Base* below.

8. If you want to launch the Ocularis component download page, click the link above the **Finish** button. If you are finished installing on this computer, click **Finish**.

The installation of Ocularis Base will create the following icon on the desktop:

Licensing Ocularis Base

Once the Ocularis Base component software is installed, an additional licensing step is required.

- All new installations require the Ocularis Base to be licensed with an Ocularis 5 SLC.
- You may license Ocularis automatically, any time of the day or night, 24/7/365!
- Licensing may be done online or offline.

The actions related to Ocularis licenses include:

- **Activating the Ocularis SLC**– Use when licensing Ocularis for the first time or with certain upgrades.
- **Refreshing the Ocularis SLC**– Use when the license status of Ocularis changes.
- **Deactivating the Ocularis SLC**– Use when you need to move Ocularis Base from one computer to another or during certain upgrades.

> ***Note:*** *To use the license activation application, you must be logged into the computer using an account with Windows Administrator privileges.*

Activating the Ocularis SLC

Activating an Ocularis SLC is done the first time Ocularis is installed. This applies when the installation is on a brand new system or if you are upgrading from Ocularis versions 3.5 or earlier.

The steps to activate are different based on whether the Ocularis Base computer is connected to the internet or not.

- To Activate an Ocularis license with Internet Connectivity
- To Activate an Ocularis license without Internet Connectivity

To Activate an Ocularis license with Internet Connectivity

1. Launch the *Ocularis License Activation* application.
2. The first time you license Ocularis, you need to enter your new SLC. You receive this SLC when you purchase the product.

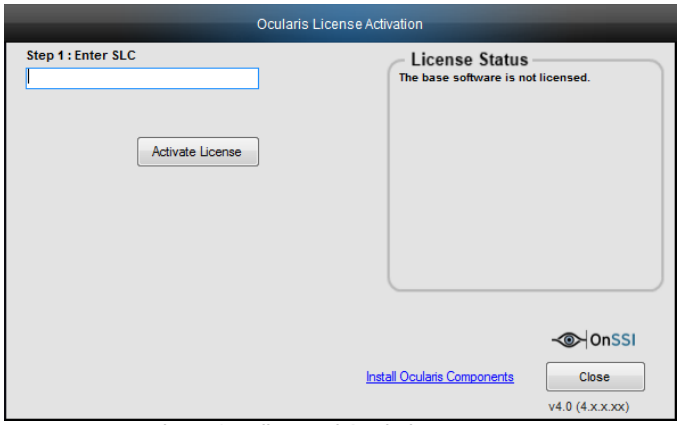


Figure 9 Unlicensed Ocularis Base

3. Enter the SLC (or paste it from the Clipboard) and click **Activate License**.

   The licensing application will collect relevant data including the SLC and send this information over the internet to OnSSI's licensing server. OnSSI's licensing server validates the information and sends back the activation required to license the software. This process is nearly instantaneous.

   If there is no internet connectivity, a message appears indicating as such. You may try again if you think you should have connectivity or click **OK** to proceed with offline activation. See *To Activate an Ocularis license without Internet Connectivity* below.

Once activation is complete, a confirmation pop-up appears. Click **OK**. You are done! The **License Status** area of the *Ocularis License Activation* screen displays updated camera counts and other information based on your SLC.

> ***A Note about License Counts:***
>
> *Ocularis v5 introduced categories where recorder licenses are assigned. These categories are labeled:*
>
> RL-1 Channels
> RL-2 Channels
> RL-3 Channels
>
> *The categories simply represent a counter where similar recorder counts are placed. Since Ocularis v5 supports Mix & Match of recorders, different recorder counts can be combined into the same category. For example: camera licenses for RC-E and Ocularis Ultimate Recorder would both appear in the category RL-1 Channels. If you had 50 RC-E licenses and 50 Ocularis Ultimate licenses, the RL-1 count would equal 100. This also gives you the flexibility to exchange licenses between the two recorders, allowing you the time and flexibility to migrate cameras from one recorder to another at your own pace.*
>
> *You will see the new RL counts in the Ocularis License Activation application and in the About Tab of the Ocularis Administrator application. Here you can get a detailed breakdown of each specific recorder camera license count.*

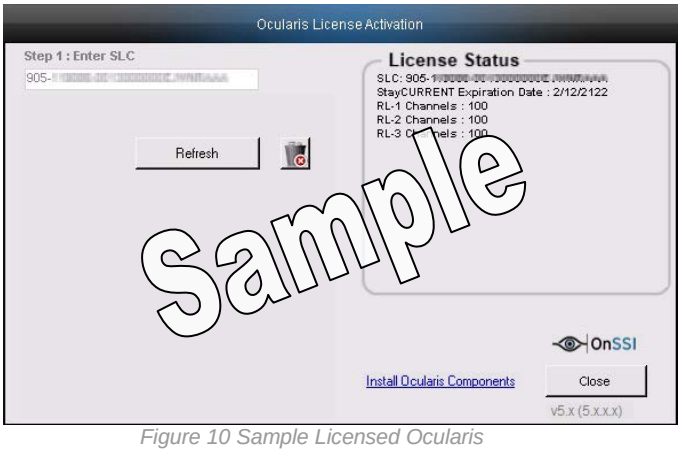


Figure 10 Sample Licensed Ocularis

4. Proceed with *Installing Ocularis Components* below.

To Activate an Ocularis license without Internet Connectivity

1. Launch the *Ocularis License Activation* application.
2. The first time you license Ocularis, you need to enter your new SLC in the field labeled: **Step 1: Enter SLC**. (see Figure 9 above).

3. Click the **Activate License** button. You will receive a pop-up with the message reminding you that there is no internet connectivity and you should use offline activation. Click **OK** to close this dialog. The screen updates with additional steps:

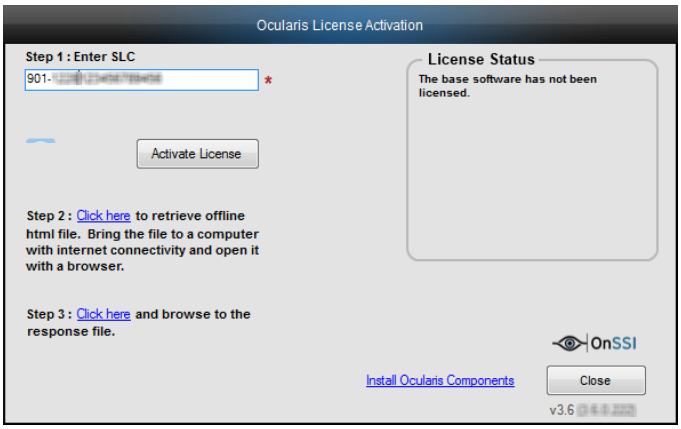

Ocularis License Activation
Step 1 : Enter SLC
901-
License Status
The base software has not been licensed.
Activate License
Step 2 : Click here to retrieve offline html file. Bring the file to a computer with internet connectivity and open it with a browser.
Step 3 : Click here and browse to the response file.
OnSSI
Install Ocularis Components
Close
v3.6

Figure 11 Additional Steps for Offline Licensing

4. Click the link in *Step 2: Click here to retrieve offline html file*.

   An html file is created named `OcularisActivationRequest.html` and stored in:

   `c:\Program Files (x86)\OnSSI\Ocularis Licensing Activation\OfflineActivation`

5. Copy this file to portable media and bring to a computer that has internet connectivity.
6. Launch the `OcularisActivationRequest.html` file (double-click it).
7. The default web browser should launch and load a page with a Download button. Click the **Download** button.
8. The browser may ask you if you want to save a file called `response.xml` from `licensing.onssi.com`. Choose **Save As** and save it to portable media.
9. Bring the `response.xml` file back to the Ocularis Base computer.
10. On the Ocularis License Activation screen (see Figure 11), click the link in *Step 3: Click here and browse to the response file*.
11. In the resulting Windows' Open dialog, browse to the `response.xml` file you just brought from the internet connected machine. Select the file and click **Open**.
12. You should see a 'License Activation Successful' pop-up. Click **OK**.

You are done! The **License Status** area of the *Ocularis License Activation* screen displays updated camera counts and other information based on your SLC. The 'Activate License' changes to 'Refresh' to accommodate future updates.

Proceed with *Installing Ocularis Components* below.

Refreshing the Ocularis SLC

Refreshing your Ocularis SLC is done when a change is made to your Ocularis License. For instance, you add additional camera licenses to Ocularis or you upgrade from a demo version to a retail version. Refreshing is simple but the process differs, depending on the Ocularis Base computer having internet connectivity.

To Refresh an Ocularis license with Internet Connectivity

1. Launch the *Ocularis License Activation* application.
2. Click the **Refresh** button. The licensing application will collect relevant data including the SLC and send this over the internet to OnSSI's licensing server. OnSSI's licensing server validates the information and sends back the activation required to license the software. This process is nearly instantaneous.

Once activation is complete, a confirmation pop-up appears. Click **OK**.

You are done! The **License Status** area of the *Ocularis License Activation* screen displays updated license information based on your SLC.

To Refresh an Ocularis license without Internet Connectivity

1. Launch the *Ocularis License Activation* application.
2. Click the **Refresh** button. You will receive a pop-up with the message reminding you to check internet connectivity or refresh offline. Click **OK** to close this dialog. The screen updates with additional steps.
3. Click the link in *Step 2: Click here to retrieve offline html file*.

   An html file is created named `OcularisActivationRequest.html` and stored in:

   `c:\Program Files (x86)\OnSSI\Ocularis Licensing Activation\OfflineActivation`
4. Copy this file to portable media and bring to a computer that has internet connectivity.
5. Launch the `OcularisActivationRequest.html` file (double-click it).
6. The default web browser should launch and load a page with a Download button. Click the **Download** button.
7. The browser may ask you if you want to save a file called `response.xml` from `licensing.onssi.com`. Choose **Save As** and save it to portable media. For subsequent licensing. the file may have the format 'response(x).xml' where the 'x' is 1, 2, etc. based on the number of response files created.
8. Bring the `response.xml` file back to the Ocularis Base computer.
9. On the Ocularis License Activation screen, click the link in *Step 3: Click here and browse to the response file*.
10. In the resulting Windows' Open dialog, browse to the `response.xml` file you just brought from the internet connected machine. Select the file and click **Open**.
11. You should see a 'License Successfully Refreshed' pop-up. Click **OK**.

You are done! The **License Status** area of the *Ocularis License Activation* screen displays updated information based on your SLC.

Deactivating the Ocularis SLC

Deactivating your Ocularis SLC is done when you want to move the Ocularis Base software from one computer to another computer or during certain upgrades. Before you begin, consider that when you move Ocularis Base from one computer to another, the database which stores Ocularis settings, as well as existing Bookmarks, must be moved manually from the source computer to the destination computer. There is also a limit to the number of deactivations for each license. Typically, you may deactivate an Ocularis SLC up to five times. Beyond that, you need to contact OnSSI Technical Support for further assistance.

To Deactivate an Ocularis license

1. Launch the *Ocularis License Activation* application.
2. Notice the *Deactivate License* icon.

   Click the *Deactivate License* icon. You will receive a pop-up with a warning message reminding you that license deactivation stopped the Base from functioning.
3. If you are sure you want to proceed, click **Yes** to deactivate the Ocularis SLC.

On the destination computer, install Ocularis Base (see *Installing Ocularis Base* on page 12) and activate the same SLC on this computer (see *Activating the Ocularis SLC* on page 16). Restore the Ocularis SQL Database and bookmarks (see the document *Ocularis Base Database Backup*). If you had events configured on the original Ocularis Base computer, the event proxies will need to be updated to direct events to this new Ocularis Base IP address.

If the computer does not have internet connectivity, contact OnSSI Tech Support to deactivate the SLC.

Installing Ocularis Components

Certain components of Ocularis, namely: *Ocularis Client*, *Ocularis Administrator* and Ocularis recording components, are downloaded and installed from a central webpage located on the Ocularis Base machine. This makes installation easy as system administrators need not obtain separate installation files and move them from computer to computer. Since computers running Ocularis components need to have network connectivity to the Ocularis Base system anyway, the installation files for Ocularis components may be accessed from the Base machine.

A local webpage must be launched in order to download Ocularis components.

Ocularis Component Location

Ocularis components may be installed in various locations on a network. The configuration chosen depends on many factors including (but not limited to): the number of cameras licensed, the recording component used and the availability of computer hardware for the system.

Single Server System

In most cases, a single server system will suffice. In this layout, a central server is used as the primary location for the following components:

- Ocularis Base
- Recording Component
- and perhaps even the *Ocularis Administrator* (depending on the graphics card)

A single server system is a good system to start with when first implementing Ocularis, especially on smaller systems (those with less than 30 cameras). In an Ocularis Professional environment, it is even acceptable to run the components on a Windows 7 or 8 PC, rather than a server class machine, provided the camera count is low. Networked workstations will have the *Ocularis Client* installed on them. You may install the *Ocularis Client* component on an unlimited number of workstations.

As the system grows and cameras are added or upgraded, the capacity of the recording component computer will be reached. The expansion process would be to then simply add an additional server on the network to house an additional instance of the recording component and install the new cameras on the new recorder. With Ocularis, the location of the camera is seamless to the operator.

Distributed System

In cases where the systems are larger or with Ocularis Enterprise or Ocularis Ultimate, a multiple server system (also called ‘Distributed System’) is recommended. In a Distributed System, separate dedicated servers are used with single components installed on each. The Ocularis Base may reside on one server (with or without a recording component), recording components each on their own servers, and the *Ocularis Administrator* and *Ocularis Client* on one or more networked workstations.

Which system is best for me?

It is important to determine the general layout of where you want components to be installed on new Ocularis installations. In general, it is safe for most users to select a Single Server System and grow into a Distributed System. If you have hundreds of cameras (or more), use a Distributed System as a model. Otherwise, most installations will be fine with a Single Server layout to start.

There is no set formula to determine the layout for each installation, as each organization is unique. The system layouts described here are simply for use as a general guideline. Contact OnSSI Sales Engineering for system layout advice if you are unsure.

TO ACCESS THE OCULARIS COMPONENT DOWNLOADS PAGE

Note: Be sure to turn off any Firewalls running on the Ocularis Base machine.

1. Determine the layout of the Ocularis system and go to the machine where you want to install the component.
2. Access the download webpage located on the Base computer through a browser using the following URL:

   `http://[BASE_IP]:[port]/OcularisService`

   where **[BASE-IP]** is either the IP Address or computer name of the Ocularis Base machine and port is the IIS port number. In most cases, the default port 80 is used and it is not necessary to enter it here. This URL will redirect to a longer one, which may also be used:

   `http://[BASE_IP]:[port]/OcularisService/InstallerWebsite/install.html`

The following web page appears:

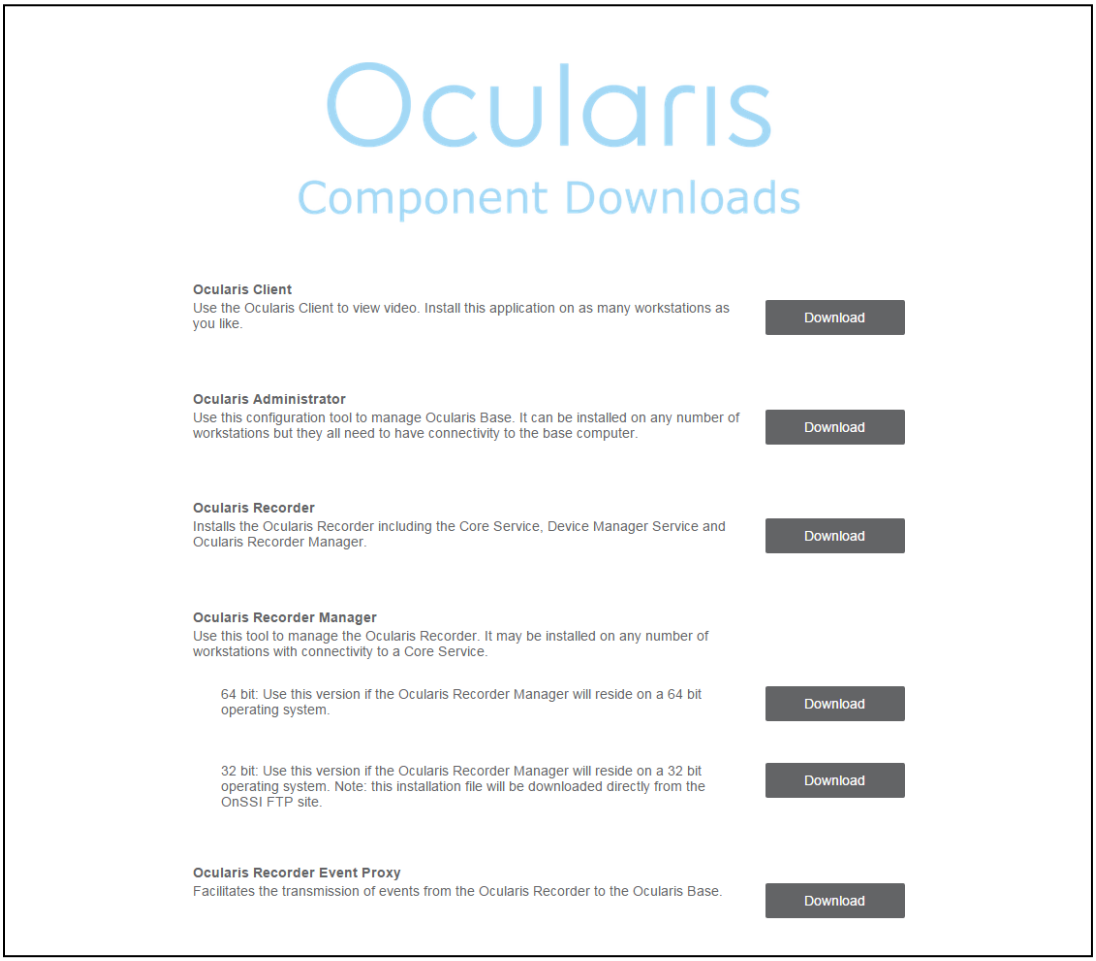

Ocularis
Component Downloads
Ocularis Client
Use the Ocularis Client to view video. Install this application on as many workstations as you like.
Download
Ocularis Administrator
Use this configuration tool to manage Ocularis Base. It can be installed on any number of workstations but they all need to have connectivity to the base computer.
Download
Ocularis Recorder
Installs the Ocularis Recorder including the Core Service, Device Manager Service and Ocularis Recorder Manager.
Download
Ocularis Recorder Manager
Use this tool to manage the Ocularis Recorder. It may be installed on any number of workstations with connectivity to a Core Service.
64 bit: Use this version if the Ocularis Recorder Manager will reside on a 64 bit operating system.
Download
32 bit: Use this version if the Ocularis Recorder Manager will reside on a 32 bit operating system. Note: this installation file will be downloaded directly from the OnSSI FTP site.
Download
Ocularis Recorder Event Proxy
Facilitates the transmission of events from the Ocularis Recorder to the Ocularis Base.
Download

Figure 12 Install Ocularis Components Web Page

3. Click the **Download** button next to the component you wish to download and install.
4. You may be asked whether to run or save the installation file for the component. You may save the file locally and run it later or simply run it now. Click the file to launch the installer.

The installation for each component will continue. See the instructions below specific to each component.

Installing Ocularis Administrator

- Refer to the system requirements defined on the OnSSI website for hardware specifications.
- The *Ocularis Administrator* must have network connectivity to the computer where the Ocularis Base software is installed.
- Prior to using *Ocularis Administrator* on a new system, you must license your copy of Ocularis Base. See Licensing Ocularis Base on page 16 for more details.
- Follow this procedure when installing a new system or upgrading an older version of *Ocularis Administrator*.

TO INSTALL OCULARIS ADMINISTRATOR

These instructions assume that you have installed Ocularis Base and are located at the system on which you wish to install *Ocularis Administrator*. Use these steps for all feature sets of Ocularis.

1. From the 'Ocularis Component Downloads' web page, click the **Download** button next to Ocularis Administrator.
2. You may be prompted to run or save the file; you may choose to either run it now or save it and run the installation later. In a new installation, an extraction wizard screen will appear. Follow the prompts to extract the files and then you'll see the *Welcome to Ocularis Administrator Setup Wizard* screen.
3. Launch file to run. Once **Run** has been selected, the *Welcome to Ocularis Administrator Setup Wizard* appears. Click **Next**.
4. The *License Agreement* appears. Please read, click the "*I accept*.." radio button, and then click **Next**.
5. If a previous version of the *Ocularis Administrator* is detected, a notice will appear asking for your confirmation to uninstall the older version and install the new version. Click **Yes**.
    a. An "*Are you sure you want to remove Ocularis Administrator*…?" screen appears. Click **Yes**.
    b. When the uninstall is complete, click **OK**.
6. The *Select Destination Folder* screen appears.

    You may leave the default directory path as is or change it if necessary according to your organization. If installing a version to be used as a demo, keeping the default path is recommended. Click **Next**.
7. The next screen, *Ready to Install the Program*, will confirm the file path and disk space requirements. Click **Next** if OK. Click **Back** to make changes to the directory path or the folder.

    The *Ocularis Administrator* software is installed.
8. When completed, the *Setup Wizard Complete* for *Ocularis Administrator* screen appears.
9. Click **Finish**.

The installation of *Ocularis Administrator* will create the following icon on the desktop:

Installing Ocularis Client

- The *Ocularis Client* may be installed on as many systems as desired.
- Refer to the system requirements defined on the OnSSI website for hardware specifications.
- Follow this procedure when installing a new system or upgrading existing copies of *Ocularis Client*.

TO INSTALL OCULARIS CLIENT

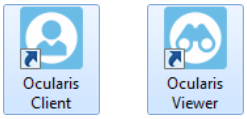
These instructions assume that you have installed Ocularis Base and are located at the system on which you wish to install *Ocularis Client*. Use these steps for all feature sets of Ocularis.

1. From the 'Ocularis Component Downloads' web page, click the **Download** button next to Ocularis Client.
2. You may be prompted to run or save the file, you may choose to either run it now or save it and run the installation later. In a new installation, an extraction wizard screen will appear. Follow the prompts to extract the files and then you'll see the *Welcome to Ocularis Client Setup Wizard* screen.
3. Once **Run** has been selected, if a previous version of the *Ocularis Client* is detected, a notice will appear asking for your confirmation to uninstall the older version and install the new version. Click **Yes**.
    a. An "*Are you sure you want to remove Ocularis Client*…?" screen appears. Click **Yes**.
    b. When the uninstall is complete, click **OK**.
4. The *Welcome to Ocularis Client Setup Wizard* appears. Click **Next**.
5. The *License Agreement* appears. Please read, click the "I accept.." radio button and then click **Next**.
6. The *Select Destination Folder* screen appears.

    You may leave the default directory path as is or change it if necessary according to your organization. If installing a version to be used as a demo, keeping the default path is recommended. Click **Next**.
7. The *Select Language* screen appears. Select the desired language for *Ocularis Client* from the drop-down menu. The language may be changed again after the software has been installed. Click **Next**.
8. The next screen, *Ready to Install the Program*, will confirm the file path and disk space requirements. Click **Next** if OK. Click **Back** to make changes to the directory path or the folder.

    The *Ocularis Client* software is installed.
9. When the *Ocularis Client* Setup is completed, the *Setup Wizard Complete* for *Ocularis Client* screen appears. Click **Finish**.

The software installation will result in the display of the following desktop icons:



Installing Ocularis Recorder

- The Ocularis Recorder may be installed on the same computer as other components including legacy recorders (pending available system resources).
- Refer to the system requirements defined on the OnSSI website for hardware specifications.
- Multiple scripts are used for installation, so you should disable any active virus scanners for the duration of installation.
- The Ocularis Recorder must not be installed on a compressed drive, since this can result in problems with the database. A drive on which Ocularis Recorder is already installed must not be compressed subsequently.
- DirectX is installed during installation, and Microsoft .NET Framework 4 as well, which may require a restart in the case of a first time installation.
- The recording component included with Ocularis 5 requires a corresponding recorder license (SLC). This code is used to generate a file (license.key or license.zip) that is imported using the Ocularis Recorder Manager after the software is installed.
- The server software (Core Service) can only be installed on computers with the NTFS file system.
- You may be asked to install Microsoft Visual C++ during the installation.

Firewalls

- Multiple ports on the computer must be available by default to allow the Ocularis Recorder software to function correctly in a network environment with a firewall. These are in the range from 60000 to 60008 (TCP communication), 63000 (TCP) and 60007 (UDP, image transmission).
- The TCP alarm ports of the camera must also be accessible on the server computer that administers a camera to guarantee alarm processing.
- Some cameras use the 'RTSP over RTP over UDP' standard for MPEG4 image transmission. In this case, the server sends the requirements (e.g. frame rate and resolution) to the camera via TCP port 554. The camera sends the image data to the server via a UDP port.

The corresponding ports must therefore not be blocked between the camera and the server.

The versions of recording components included with Ocularis 5 include:

Ocularis Professional Recorder	R7 v6.7.1
Ocularis Enterprise Recorder	R7 v6.7.1
Ocularis Ultimate Recorder	R7 v6.7.1

Recorder Components

These recorders have the following components:

- **Core Service** – This service authenticates users, permissions and some alarms. It runs as a service. There may be many cores in an installation but there must be at least one 'Master' core. In Ocularis Enterprise and Ocularis Ultimate you can set up one core ('the slave') to be redundant for the primary ('the master') core. In Ocularis Professional, there is a 'Master Core' on each recording component server.
- **Device Manager (DM)** – This service communicates with devices (cameras) and clients. There may be many DMs in an installation. In Ocularis Ultimate, you may set up one DM to be a failover (redundant recorder) for another DM in the event of a DM failure. In Ocularis Professional, there is a DM on each computer with a Master Core.
- **Ocularis Recorder Manager** – This is the software application used to configure the Core and DM(s).

Recorder Component Installation

These instructions assume that you have installed Ocularis Base and are located at the system on which you wish to install the Ocularis v5 Recorder.

Reminder: the operating system on which you install this component must be 64-bit.

There are four set up types for installation:

a. Standard installation (Manager & Server)

Use this set up type to install all recorder components on the current system.

b. Manager Installation **only**

Use this set up type to install only the Ocularis Recorder Manager software on the current system.

c. Device Manager Installation

This set up type installs the Device Manager (DM) component as well as the Ocularis Recorder Manager software on the current system. A 'Device Manager' is equivalent to 'Recorder' and the terms are used interchangeably.

d. Custom Installation

This setup type allows you to pick and choose which component you would like to install on the current system.

The steps below outline each of the four set up types.

NOTE:

- **With Ocularis Professional ONLY you must install a Master Core along with a DM on each server. You may use the 'Manager & Server' option for each recording server. Each server requires a unique SLC from OnSSI Sales.**
- **With Ocularis Enterprise or Ultimate there should be only one Master Core and optionally one or more Slave Cores in the entire environment. Use the 'Manager & Server' option only on the first computer. Each additional server will have just a 'Device Manager' or use 'Custom' to install a DM and a 'Slave' core. These models use only one SLC per environment.**

Standard installation (Manager & Server)

The standard installation installs the system with the managers (configuration application also called the 'Ocularis Recorder Manager' and device manager) and Server ('Core') on a single system ('Manager & Server').

1. From the 'Ocularis Component Downloads' web page, click the **Download** button next to Ocularis Recorder.
2. Choose to *Run* the application to launch the installer.
3. Select the installation language. You can configure the language of the user interface after installation.
4. Click **OK** to start installation.
5. At the *Welcome* screen, click **Next**.
6. Read the software license agreement, accept the terms and then click **Next**.
7. Change the destination folder if desired. Click **Next**.

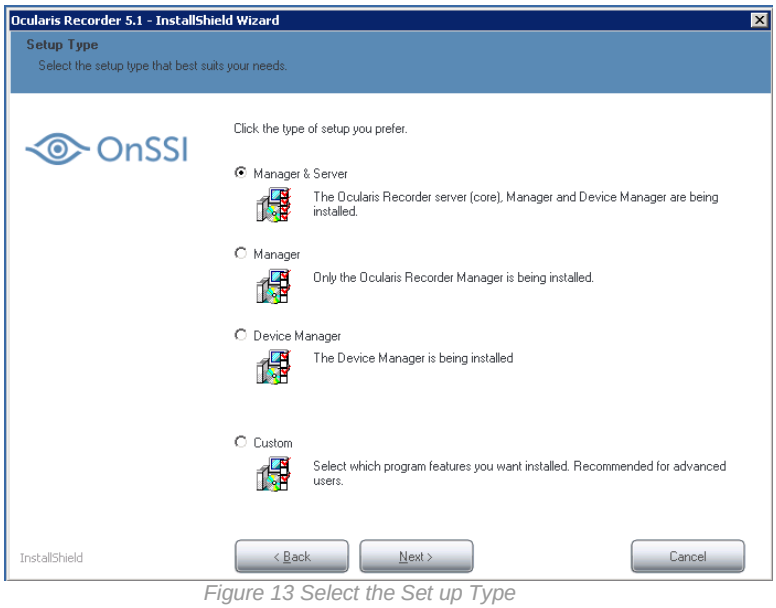

Ocularis Recorder 5.1 - InstallShield Wizard
Setup Type
Select the setup type that best suits your needs.
OnSSI
Click the type of setup you prefer.
Manager & Server
The Ocularis Recorder server (core), Manager and Device Manager are being installed.
Manager
Only the Ocularis Recorder Manager is being installed.
Device Manager
The Device Manager is being installed
Custom
Select which program features you want installed. Recommended for advanced users.
InstallShield
< Back
Next >
Cancel

Figure 13 Select the Set up Type

8. Select 'Manager & Server' as the Setup Type and click Next.

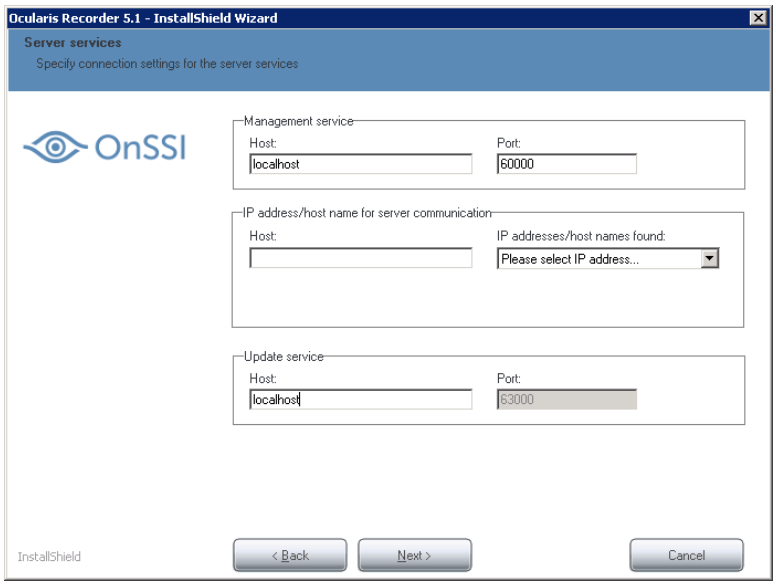


Figure 14 Communication Information

The port number of the Management service is set at '60000'. If the port number must be changed, contact OnSSI Tech Support.

9. In the Host field under *'IP address/hostname for server communication'*, enter the IP Address for the Device Manager. Selectit from the drop-down list labeled 'IP addresses/host names found'. This should be the IP Address of the computer you are running the installation on.

Neither the IP 127.0.0.1 nor the host name 'localhost' may be used for communication with the server.

In the *Update service* section, 'localhost' is acceptable if you are installing the UpdateService SVR on the Master Core Server. This is the default value and is recommended. See *Update Service* on page 34 for more information on the Update Service.

Click **Next**.

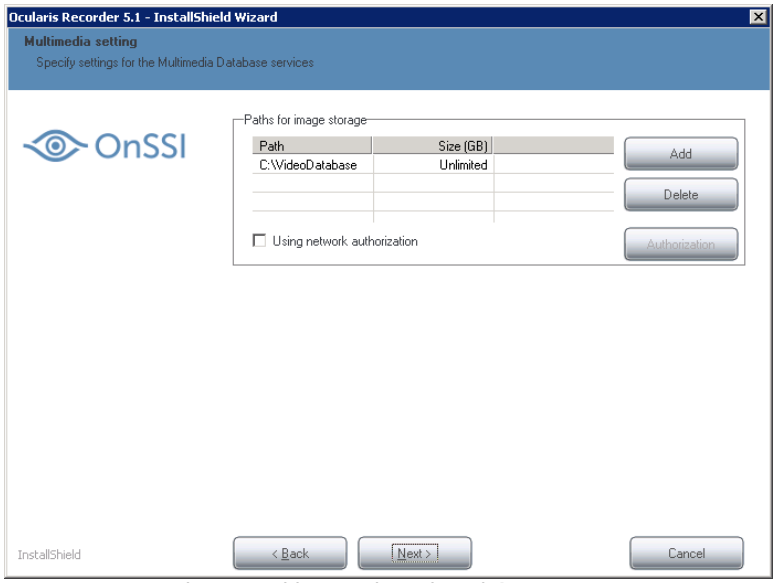


Figure 15 Video Database (Zone) Setup

10. If you want, alter the existing path for image storage, or delete or add additional folder paths. Additional locations or 'zones' for video storage may be added now or after the software has been installed. If the folder is created on a network drive, enter the complete UNC path.

Example: \\IP Address\Release name\path

If the network drive is protected with a user name and password, select **Using network authorization** and click **Authorization**.

Enter the user name and password for accessing the network drive, and then click **OK**. Ensure that the specified user is available locally and that the domain is included in the user name field (e.g. "Domain\\User name").

A Note About Zones

- A zone should never be as large as the available maximum storage space on the hard disk.
- The hard drive's cluster size should be 64KB.
- You can use a maximum of 10 zones per DM; each zone should be on its own dedicated partition; it is better to have few larger zones than many smaller zones that this impacts performance
- It is recommended to store video data on a separate hard disk or RAID system. Do **NOT** use a hard disk connected via USB or firewire.
- Zones on the network may be identified with a UNC path. You'll also need to provide network username and password.
- **Note: it is STRONGLY recommended to use a storage location with a minimum of 200 GB available space and set the maximum size of the zone to 'Unlimited'. Otherwise, there is a risk of running out of disk space and having the recording stop.**

Click **Next**.

11. Click **Install**.

12. When asked, accept the EULA (End User License Agreement) for installing the Microsoft DirectX 9 component. This window may appear behind the primary installation window.

    You may be asked to restart the computer.

The Ocularis Recorder components: Core Server, Device Manager and Recorder Manager are now installed on your computer.

Manager Installation

The 'Manager' refers to the software used to configure the Ocularis Recorder (Core). This is called *Ocularis Recorder Manager*. This application is installed when you choose the 'Manager & Server' option from the prior section. However, you may want to also install this application on remote computers, allowing you access to configure the recorder from anywhere on the network. There are two ways to install only the Ocualris Recorder Manager.

From the main recorder installation on the Ocularis Component Downloads page:

1. From the ‘Ocularis Component Downloads’ web page, click the **Download** button next to *Ocularis Recorder*.
2. Choose to *Run* the application to launch the installer.
3. Select the installation language. You can configure the language of the user interface after the installation.
4. Click **OK** to start installation.
5. At the *Welcome* screen, click **Next**.
6. Read the software license agreement, accept the terms and then click **Next**.
7. Change the destination folder if desired. Click **Next**.
8. Select 'Manager' as the Setup Type (*see Figure 13*) and click **Next**.
9. Click **Install** to begin the installation.
10. When asked, accept the EULA (End User License Agreement for installing the DirectX 9 component. This window may appear behind the primary installation window

From the shortcut on the Ocularis Component Downloads page:

1. From the ‘Ocularis Component Downloads’ web page, click the **Download** button next to Ocularis Recorder Manager (either 64-bit or 32-bit).
2. Choose to *Run* the application to launch the installer (or save the file and launch manually).
3. Change the destination folder for the installation files if desired. Click **Next**. The installation files are extracted.
4. At the *Extraction Complete* screen, make sure the 'Install Ocularis Recorder Manager' checkbox is checked. Click **Finish**.
5. Select the installation language. You can configure the language of the user interface after the installation.
6. Click **OK** to start installation.
7. At the *Welcome* screen, click **Next**.
8. Read the software license agreement, accept the terms and then click **Next**.
9. Change the destination folder for the application files if deaired. Click **Next**.
10. Click **Install** to begin the installation.
11. When asked, accept the EULA (End User License Agreement for installing the DirectX 9 component. This window may appear behind the primary installation window.
12. On the Wizard Complete screen, click **Finish**.

Device Manager Installation

In the Device Manager installation, only the database modules for the video database are installed together with the Ocularis Recorder Manager on a different computer from the already installed Ocularis Recorder Manager and Core

server. The Device Manager reduces the utilization of the core server because the image database is located partially or entirely on another server.

In order to configure the Device Manager server, you need an installed and configured Ocularis Recorder Manager and Master Core server .

1. From the 'Ocularis Component Downloads' web page, click the **Download** button next to Ocularis Recorder.
2. Choose to *Run* the application to launch the installer.
3. Select the installation language. You can configure the language of the user interface after installation.
4. Click **OK** to start installation. You may be asked to install Microsoft Visual C++.
5. At the *Welcome* screen, click **Next**.
6. Read the software license agreement, accept the terms and then click **Next**.
7. Change the destination folder if desired. Click **Next**.
8. Select 'Device Manager' as the setup type (*see Figure 13*) and click **Next**.

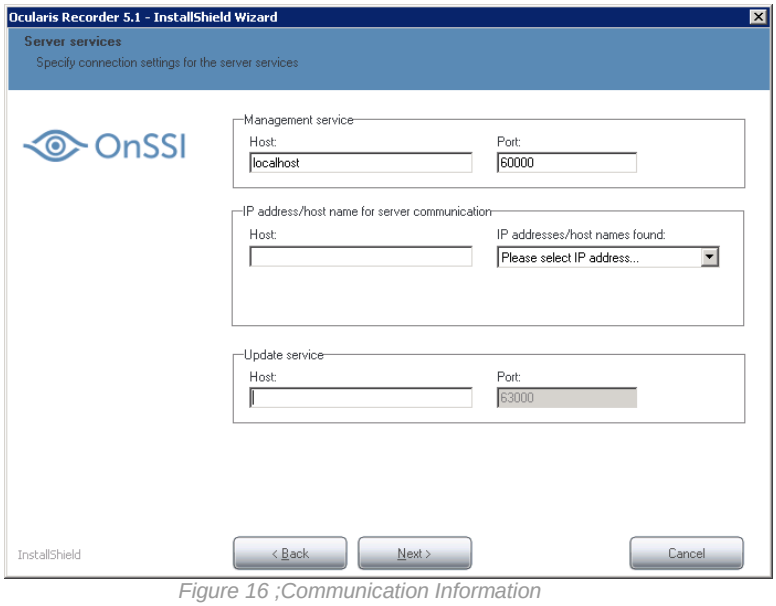


Figure 16 ;Communication Information

9. In the Management service area, specify the IP address of the Master Core in the Host field. Leave the port number unchanged at '60000'.

It is important to enter the IP address of the Master Core in the Host field of the Management service area in order for the system to function properly. Leave the port as 60000

In the *IP address/host name for server communication* section, the IP address of the Device Manager should be placed in the *Host* field. This can be done by selecting it from the *IP address/host names found* in the drop-down list. The list shows you all of the existing network addresses and host names of the PC or server. If there is more than one network adapter on this computer, be sure to select the correct one.

Neither the IP 127.0.0.1 nor the host name 'localhost' may be used for communication with the server.

In the *Update service* section, enter the IP address where the UpdateService SVR (Server module) is installed. This is most likely the IP address of the Master Core Server since this is the default. See *Update Service* on page 34 for more information on the Update Service.

Click **Next**.

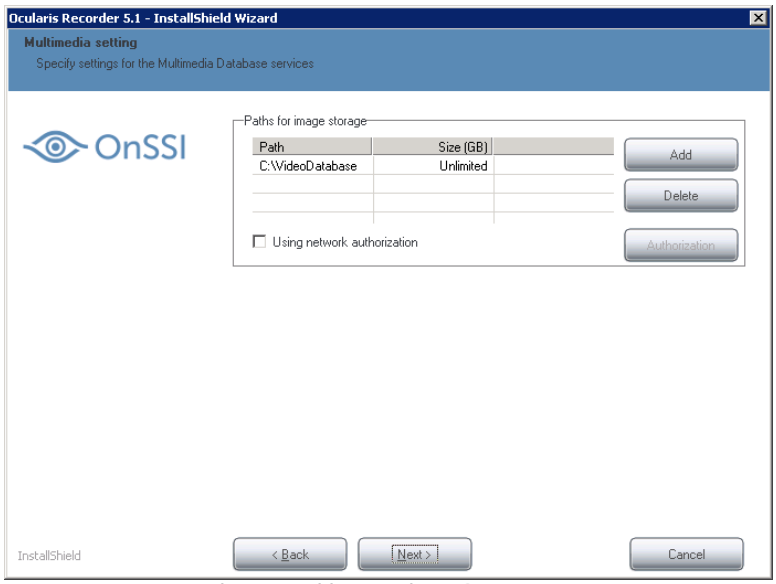


Figure 17 Video Database Setup

10. If you want, alter the existing path for image storage, or delete or add additional folder paths. Additional locations, or 'zones', for video storage may be added now or after the software has been installed. If the folder is created on a network drive, enter the complete UNC path.

    Example: "\\Server name\Release name\Path..." or "\\IP address\Release name\Path..."

    If the network drive is protected with a user name and password, check **Using network authorization** and click **Authorization**.

    Enter the user name and password for accessing the network drive, and then click **OK**. Ensure that the specified user is available locally and that the domain is included in the user name field (e.g. "Domain\\User name").

A Note About Zones

- A zone should never be as large as the available maximum storage space on the hard disk.
- The hard drive's cluster size should be 64KB.
- You can use a maximum of 10 zones per DM; each zone should be on its own dedicated partition; it is better to have few larger zones than many smaller zones that this impacts performance
- It is recommended to store video data on a separate hard disk or RAID system. Do **NOT** use a hard disk connected via USB or firewire.
- Zones on the network may be identified with a UNC path. You'll also need to provide network username and password.
- **Note: it is STRONGLY recommended to use a storage location with a minimum of 200 GB available space and set the maximum size of the zone to 'Unlimited'. Otherwise, there is a risk of running out of disk space and having the recording stop.**

11. Click **Next**.
12. Click **Install**. The Device Manager is installed on your computer. You may be asked to restart the computer.

Custom Installation

In a 'Custom' installation you can install selected modules. In Ocularis Enterprise and Ultimate, it is also possible to install an additional core server as a Slave that serves as a redundant server and thus increases the reliability of the Master Core server.

1. From the 'Ocularis Component Downloads' web page, click the **Download** button next to Ocularis Recorder.
2. Choose to *Run* the application to launch the installer.
3. Select the installation language. You can configure the language of the user interface after installation.
4. Click **OK** to start installation.
5. At the *Welcome* screen, click **Next**.
6. Read the software license agreement, accept the terms and then click **Next**.
7. Change the destination folder if desired. Click **Next**.
8. Select 'Custom' as the setup type (*see Figure 13*) and click **Next**.
9. Select the desired services and features. **Core Service Slave and Core Service Master cannot both be installed simultaneously on the same machine.**

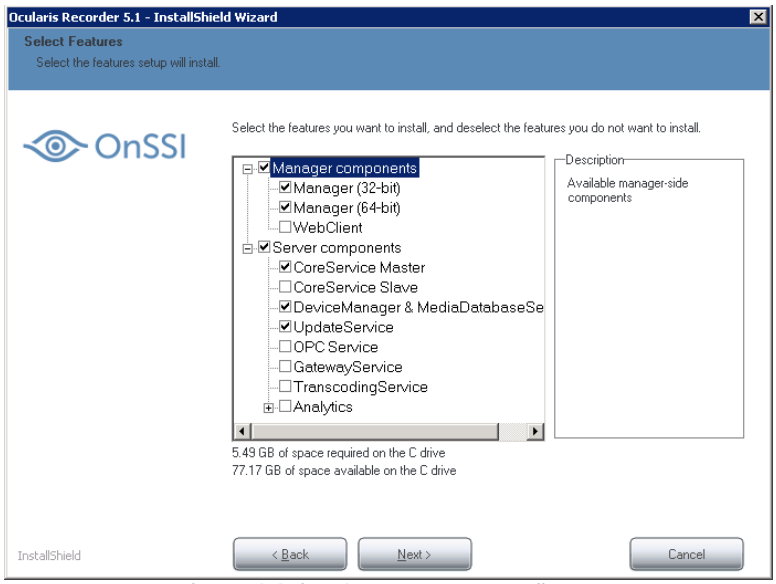


Figure 18 Select Components to Install

You can deselect services and features that are not required.

IMPORTANT: if a previously installed service is deselected, it will be removed.

The 'UpdateService' listed in Figure 18 is new as of v5.1. The service listed here is for the server component of the UpdateService (Update Service SVR). The default is to install this server service on the same computer as the Master Core. It is not, however, required to be installed in this location. It may be installed anywhere on the network. With Ocularis Enterprise and Ultimate, this server service should only be installed once. With Ocularis Professional, install it on each Master Core. If you have already installed this service and are using the 'Custom' option to install other components, such as a CoreService Slave, be sure to uncheck the UpdateService so that it is not installed twice.

For more details on the Update Service, see *Update Service* on page 34.

10. Click **Next**.

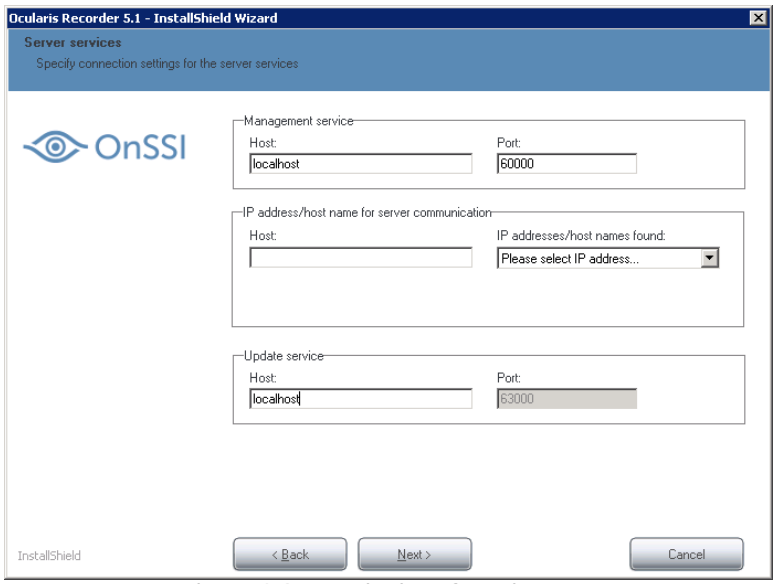


Figure 19 Communication Information

11. This screen is dynamic based on the components you selected to install.

- If you are installing only a Master Core Server:
  - *Management service/Host and Port:* these fields are disabled but should contain 'localhost' and '60000'
  - *IP address/host name for server communication-Host:* this field should contain the IP Address of the Master Core Server
  - The *Update service-Host* field should contain 'localhost' and '63000' in the *Port* field.
- If you are installing only a Master Slave Server:
  - *Management service/Host and Port:* Enter the IP Address of the Master Core in the Host field and '60000' in the Port field
  - *IP address/host name for server communication-Host:* these fields are disabled
  - The *Update service-Host* field should contain the IP address of the UpdateService SVR component which is most likely on the Master Core Server and '63000' in the *Port* field.
- If you are installing only a Device Manager:
  - *Management service/Host and Port:* Enter the IP Address of the Master Core in the Host field and '60000' in the Port field
  - *IP address/host name for server communication-Host:* this field should contain the IP address of the Device Manager
  - The *Update service-Host* field should contain the IP address of the UpdateService SVR component which is most likely on the Master Core Server and '63000' in the *Port* field.
- If you are installing a Master Core Server and a Device Manager:
  - *Management service/Host and Port:* these fields are disabled but should be 'localhost' and '60000'
  - *IP address/host name for server communication-Host:* this field should contain the IP Address of the Device Manager
  - The *Update service-Host* field should contain the IP address of the UpdateService SVR component which is most likely on the Master Core Server (so 'localhost' is acceptable) and '63000' in the *Port* field.
- If you are installing a Slave Core Server and a Device Manager:
  - *Management service/Host and Port:* Enter the IP Address of the Master Core in the Host field and '60000' in the Port field
  - *IP address/host name for server communication-Host:* this field should contain the IP address of the Device Manager
  - The *Update service-Host* field should contain the IP address of the UpdateService SVR component which is most likely on the Master Core Server and '63000' in the *Port* field

The Host field in the IP address/host name for server communication area should be populated by selecting it from the drop-down menu or you may enter it manually. The drop-down list shows you all of the existing network addresses of the PC or server. If there is more than one network adapter on this computer, be sure to select the correct one

12. When ready, click **Install**.
13. If asked, accept the EULA (end user license agreement) for installing the Microsoft DirectX 9 component. This window may be behind the primary installation window.

The modules and services are now installed on your computer. You may be asked to restart the computer.
A desktop icon appears for the Ocularis Recorder Manager. All relevant components appear in the Windows Start menu under OnSSI→Ocularis Recorder.

Update Service

Ocularis v5.1 includes a new service called 'Update Service'. The Update Service is a service that will automatically check online for updates to recording system components and download the update if it is available. Recorder updates are typically made available once per month. By default the system will check for the update nightly at 3:00 a.m. and if found, will download and install the update patch. These settings may be modified.

There are two components to the Update Service: the Update Service SVR (Server module) and Update Service Agents (Client module). By default, the SVR service will be installed on the Master Core (unless unchecked using the 'Custom' install option). You may also install this service on a separate server, however there should be only one instance of the server module in an ENT or ULT system. For PRO, the Update Service SVR service should be installed on each Master Core Server (and it will be installed by default). Components installed on remote/satellite PCs will have an Update Service Agent installed by default. This allows the Update Service SVR to communicate and push any updates out to Agents on the remote machines.

Therefore, if you decide to use the default and include the Update Service SVR (Server) on the Master Core server, use either the 'Manager & Server' installation option or 'Custom' installation option. With the 'Custom' installation option, be sure that 'UpdateService' is among the checkboxes selected.

If you choose to install the Update Service SVR (Server) on a server other than the Master Core, be sure to use the 'Custom' option and that 'UpdateService' is among the checkboxes selected when installing the Update Service.

Once the UpdateService SVR option is installed, if you decide to use the 'Custom' installation option to install other components, the 'UpdateService' should be unchecked (since it is already installed).

The UpdateService uses port 63000 and 63001. It is advised to keep these default values. If you need to change these port numbers, please contact OnSSI Technical Support prior to doing so. For more information on the Update Service, refer to the document *Ocularis v5.1 Technical Notes*.

Ocularis Recorder Licensing

Unlike many other recorders, the Ocularis 5 Recorder does not license specific cameras. There is no need to identify device MAC addresses to OnSSI. Rather, the number of channels (or streams) is licensed on the recorder's Master Core. The license process for the Ocularis 5 Recorders has been streamlined and simplified. With these recorders, simply activate your recorder SLC from within the software. Licensing is available using an online or offline method.

Supported Recorders

The recorders supported using the license methods described here are: Ocularis Professional Recorder, Ocularis Enterprise Recorder and Ocularis Ultimate Recorder. To register camera licenses for any other Ocularis legacy recorder (such as RC-E) use the instructions provided in the document *Ocularis Camera License Registration*.

For the supported recorders, the software provides a free 30-day trial. You may add cameras, configure the system, and add the recorder to Ocularis Base all during this period. You must, however, be sure to license the recorder within the 30 day period, otherwise, the recorder will cease to function. The seven digit v5 recorder SLCs contain the prefix '500'.

The process to license a demo version is slightly different than licensing a retail version.

Licensing Online

Licensing should be done prior to the end of the 30-day trial period. Licensing may be done online or offline.

Licensing a Retail Version Online

Use these steps when you need to license a production system:

From the *Ocularis Recorder Manager* application:

1. From the *Info* menu, select **Activate license**.
2. Click **OK** to the message reminding you that this feature requires a connection to the internet.
3. Verify that the *Personalize License* radio button is selected. (this is the default selection).

4. Enter your recorder SLC. This SLC should start have 7 digits starting with '500'
5. Fill out the remainder of the form.
6. Click **OK** to confirm your entries.

   The application connects to the OnSSI registration server and obtains the license.

You are done!

To view your licensing information, from the *Info* menu, select **Show license**.

Licensing a Demo Version Online

Use these steps to license a demo system.

1. You will receive a demo license file from OnSSI.
2. In the *Ocularis Recorder Manager* application, choose the *Info* menu and select **Import license file**.
3. Click **Select** to navigate to the license file from step 1. Select the file and then click **Open**.
4. Click **Import** to use the license key.

You are done!

To view your licensing information or expiration date, from the *Info* menu, select **Show license**.

Licensing Offline

Offline licensing must be done via webpage on the OnSSI website (http://onssi.com/ocularis-recorder-licensing/)

First Time Licensing

The first time (initial) license of the recorder software may be done online or offline. Offline in instructions are shown here.

1. Open the *Ocularis Recorder Manager*. In the *Info* menu, select **Request Product ID**.
2. Click **Copy** to copy the Product ID to the Windows clipboard.
3. Click **OK** to close the Product ID pop-up.
4. Paste the contents of the clipboard to a Notepad or other text file. Save the file to portable media and bring it to a computer that does have internet connectivity.
5. From a browser, go to the URL: http://onssi.com/ocularis-recorder-licensing/
6. In the section: 'Initial installation: New license code', enter your SLC (i.e. the 7 digit SLC with the prefix '500') and fill out the remainder of the form. In the Product-ID field, paste the contents of the text file that you created from the *Ocularis Recorder Manager* in step 4.
7. When done, click **Submit**.
8. The SLC is verified with the OnSSI licensing server. A license key is emailed to the email account specified on the form. There may be a delay of up to 10 minutes to receive the email from the licensing server.
9. Detach the license key file from the email attachment and bring the file to the offline computer running the *Ocularis Recorder Manager*.
10. In the *Ocularis Recorder Manager* application, choose the *Info* menu and select **Import license file**.
11. Click **Select** to navigate to the license file from step 5. Select the file and then click **Open**.
12. Click **Import** to use the license key.

You are done!

To view your licensing information or expiration date, from the *Info* menu, select **Show license**.

Changes to Server Hardware

If you need to use new hardware with an existing Ocularis Recorder, you need to update the license. This procedure is currently only available by using a form on the website.

1. On the new hardware, install the software and restore the backup. (See the document *Ocularis Recorder Database Management Guide* on how to restore a backup).
2. On the new system, open the *Ocularis Recorder Manager*. In the *Info* menu, select **Request Product ID**.
3. Click **Copy** to copy the Product ID to the Windows clipboard.
4. Click **OK** to close the Product ID pop-up.
5. If the computer you are on has internet connectivity, skip to step 7.
6. If the computer you are on does not have internet connectivity, paste the contents of the clipboard to a Notepad or other text file. Save the file to portable media and bring it to a computer that does have internet connectivity.
7. Open a browser and go to the URL: http://onssi.com/ocularis-recorder-licensing/
8. In the section 'Modified server hardware: New product ID', fill out the form providing your SLC and personal credentials. Copy and paste the Product ID from the text file to the last field on the form. Click **Submit**.
9. You will receive a new license key via the email you provided on the form. Extract the attachment.
10. On the new system's *Ocularis Recorder Manager*, choose the *Info* menu and select **Import license file**.
11. Click **Select** to navigate to the license file from the email. Select the file and then click **Open**.
12. Click **Import** to use the updated license key.

You are done!

Updating A License

If you have updated an existing installation, expanded your system or lost your license code, you can request a new license code from our website.

1. Open a browser and go to the URL: http://onssi.com/ocularis-recorder-licensing/
2. Scroll to the section 'License update: Re-licensing'. Enter your recorder SLC. This 7 digit SLC should start with the prefix '500'. Click **Submit**.
3. You will receive a new license key via the email account you provided when you first personalized the original license. Extract the license key attachment.
4. In the *Ocularis Recorder Manager*, choose the *Info* menu and select **Import license file**.
5. Click **Select** to navigate to the license file from the email. Select the file and then click **Open**.
6. Click **Import** to use the updated license key.

You are done!

Ocularis Recorder Manager

The Ocularis Recorder Manager is the client application used to configure the v5 Ocularis Recorder. This software application may be installed on any computer with network connectivity to the recorder. It is included with the download and installation of the Ocularis Recorder download link.

The Ocularis Component Downloads webpage provides a separate installer which allows you to download and install just this recorder component on another computer, saving you the time from having to download the entire recorder package. Installing this component separately is optional. This application is available for 32-bit or 64-bit operating systems so be sure to select the correct download link for your operating system.

Note: if you attempt to install this application on a computer on which it is already installed, you will see an error message:

Windows Installer
Another version of this product is already installed. Installation of this version cannot continue. To configure or remove the existing version of this product, use Add/Remove Programs on the Control Panel.
OK

These instructions assume that you have installed Ocularis Base and are located at the system on which you wish to install the *Ocularis Recorder Manager*. There should be no other instance of *Ocularis Recorder Manager* installed on the local machine.

To Install only the Ocularis Recorder Manager

1. From the 'Ocularis Component Downloads' web page, click the **Download** button next to Ocularis Recorder Manager (32-bit or 64-bit).

   > ***Note:*** *The 32-bit version will download the installation file from the OnSSI ftp server so the computer must have access to the internet.*

2. You may be prompted to run or save the file; you may choose to either run it now or save it and run the installation later.
3. Launch file to run. Once **Run** has been selected, you are prompted to select an installation language. Select a language and click **OK**. You may change the language after installation if desired.
4. At the *Welcome* screen of the installation wizard, click **Next**.
5. The *License Agreement* appears. Please read, click the "*I accept*.." radio button, and then click **Next**.
6. The *Choose Destination Location* screen appears.

   You may leave the default directory path as is or change it if necessary according to your organization. Click **Next**.
7. The next screen, *Ready to Install the Program*, click **Install** if OK or click **Back** to make changes to the directory path or the folder.

   The *Ocularis Recorder Manager* software is installed.
8. A Microsoft DirectX Setup software license agreement should appear. (it may be behind the installation window). Click **Yes** to accept the terms of the agreement.
9. When completed, the *Wizard Complete* screen appears. Click **Finish**.

The following icon appears on the desktop:

Ocularis Recorder Event Proxy

Event Proxies are used to route events and other information from a server or recording component to the Ocularis Base or other 3rd party system. The Ocularis 5 models all make use of the event proxy for events from the recorder.

To Install the Ocularis Event Proxy

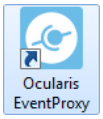
These instructions assume that you have installed Ocularis Base and are located at the system on which you wish to install *Ocularis Recorder Event Proxy*. Use these steps for all feature sets of Ocularis.

1. From the 'Ocularis Component Downloads' web page, click the **Download** button next to Ocularis Recorder Event Proxy.
2. You may be prompted to run or save the file, you may choose to either run it now or save it and run the installation later. In a new installation, you'll see the *Welcome to Ocularis Event Proxy Setup Wizard* screen.
3. Once **Run** has been selected, if a previous version of the *Ocularis Recorder Event Proxy* is detected, a notice will appear asking for your confirmation to uninstall the older version and install the new version. Click **Yes**.
    a. An "*Are you sure you want to remove Ocularis Event Proxy*…?" screen appears. Click **Yes**.
    b. When the uninstall is complete, click **OK**.
4. The *Welcome to Ocularis Event Proxy Setup Wizard* appears. Click **Next**.
5. The *Select Destination Folder* screen appears.

    You may leave the default directory path as is or change it if necessary according to your organization. If installing a version to be used as a demo, keeping the default path is recommended. Click **Next**.
6. The next screen, *Ready to Install the Program*, will confirm the file path and disk space requirements. Click **Next** if OK. Click **Back** to make changes to the directory path or the folder.

    The *Ocularis Recorder Event Proxy* software is installed.
7. When the *Ocularis Recorder Event Proxy* Setup is completed, the *Setup Wizard Complete* for *Ocularis Recorder Event Proxy* screen appears. Click **Finish**.

The software installation will result in the display of the following desktop icons:



To Configure the Ocularis Event Proxy

1. Launch the event proxy from the desktop icon or the Windows Start menu. (***Start → All Programs → OnSSI → Ocularis Event Proxy***)

Figure 20 Ocularis Event Proxy

2. The **Recorder Settings** button is the only one enabled. Click this button to enter recorder criteria.

Figure 21 Recorder Settings

3. Enter the **Server** IP Address for the recorder. Note that *localhost* is not supported. Also provide a username and password for an administrative account that is on the recorder.
4. Click **Test Connection**. Communication with the server is tested and if successful, a pop-up message appears indicating as such.
5. Click **Save & Close**.

Once the recorder is configured, the **Base Settings** button becomes enabled.

Figure 22 Configure Base Settings

6. Click **Base Settings**.

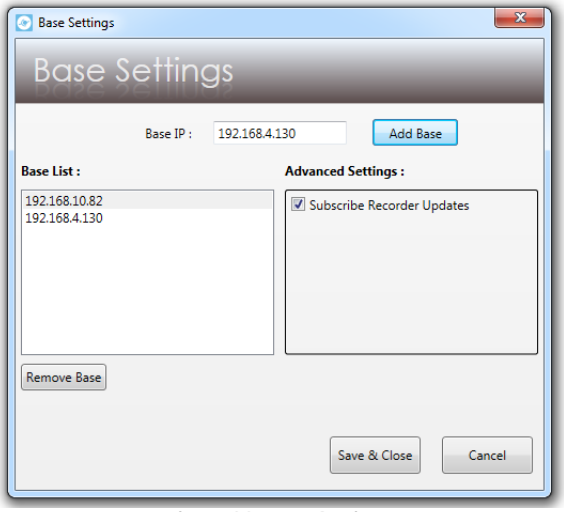


Figure 23 Base Settings

7. Enter the IP address of Ocularis Base in the **Base IP** field and click **Add Base**. You can add multiple IP addresses in the Base IP field if you need to send events to additional servers (for example: OpenSight). If you need to remove a Base IP from the list, select it and click **Remove Base**.

   If the checkbox 'Subscribe Recorder Updates' is checked, the recorder defined above in Figure 21 will be refreshed in the *Ocularis Administrator* **Servers/Events** tab when the Event Proxy service is restarted. If this recorder isn't already there it will be added automatically to the **Servers/Events** tab.

8. When done, click **Save & Close**.

Figure 24 Select Events

9. The last step is to select the events that you wish the proxy to forward to the Base IP(s) you listed. Click **Event Filters**.

   The events you see listed are grouped by Camera Events and System Events. Check the events you want transferred from the recorder to the Base. Note: any alarms that you have configured on the recorder will automatically be transferred to the Base.

10. Select the events you wish to monitor.
11. Click **Save & Close**.

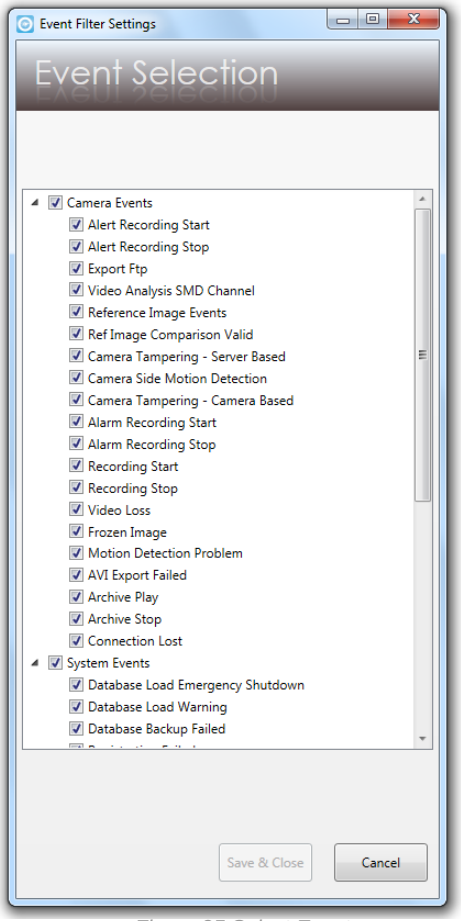


Figure 25 Select Events

Appendix A Ocularis Ports

Please note the following ports should be open for data traffic on the network when using Ocularis.

Port Number *(inbound and outbound)*	***Description***
20 and 21	Used when devices use FTP for sending event messages. FTP (File Transfer Protocol) is a standard for exchanging files across networks.
25	Used when recording servers listen for SMTP information. Also, some devices use SMTP (e-mail) for sending event messages and /or for sending images to the surveillance system server via e-mail. SMTP (Simple Mail Transfer Protocol) is a standard for sending e-mail messages between servers.
80	Port 80 is typically used by the IIS (Internet Information Services).
554	Used by some camera manufacturers.
1024 and above *(outbound only)*	**(Except ports listed below):** Used for HTTP traffic between cameras and servers.
1801	Used for Message Queuing.
5432	Used when recording servers listen for alert socket/TCP information; some devices use TCP for sending event messages.
7008	Used by Ocularis.net (communication with video walls and push video)
7210	Internal port (MaxDB) - Do not open this port in your Firewall
7563	Used for handling PTZ camera control commands and for communication with Ocularis Client.
9100	RTSP Port
60000-60008 *(inbound & outbound)*	Recorder Core/DM/MDS
60021	SIP/VOIP
63000-63001	Update Service
64222	AV Export
60601-60724	LPR/Analytics/Transcoding Engine
Any other port numbers you may have selected to use	***Examples***: If you have changed the IIS Default Web Site port from its default port number (80) to another port number.

Contact Information

On-Net Surveillance Systems (OnSSI)

One Blue Plaza

7th Floor

P.O. Box 1555

Pearl River, NY 10965

Website:	www.onssi.com	
General:	info@onssi.com	845.732.7900
Fax:		845.732.7999
Sales Support:	sales@onssi.com	845.732.7900 x 1
PreSales Support	se@onssi.com	845.732.7900 x 2
Technical Support:	support@onssi.com	845.732.7979
Training:	training@onssi.com	845.732.7900 x 4
Marketing:	marketing@onssi.com	845.732.7900 x 5